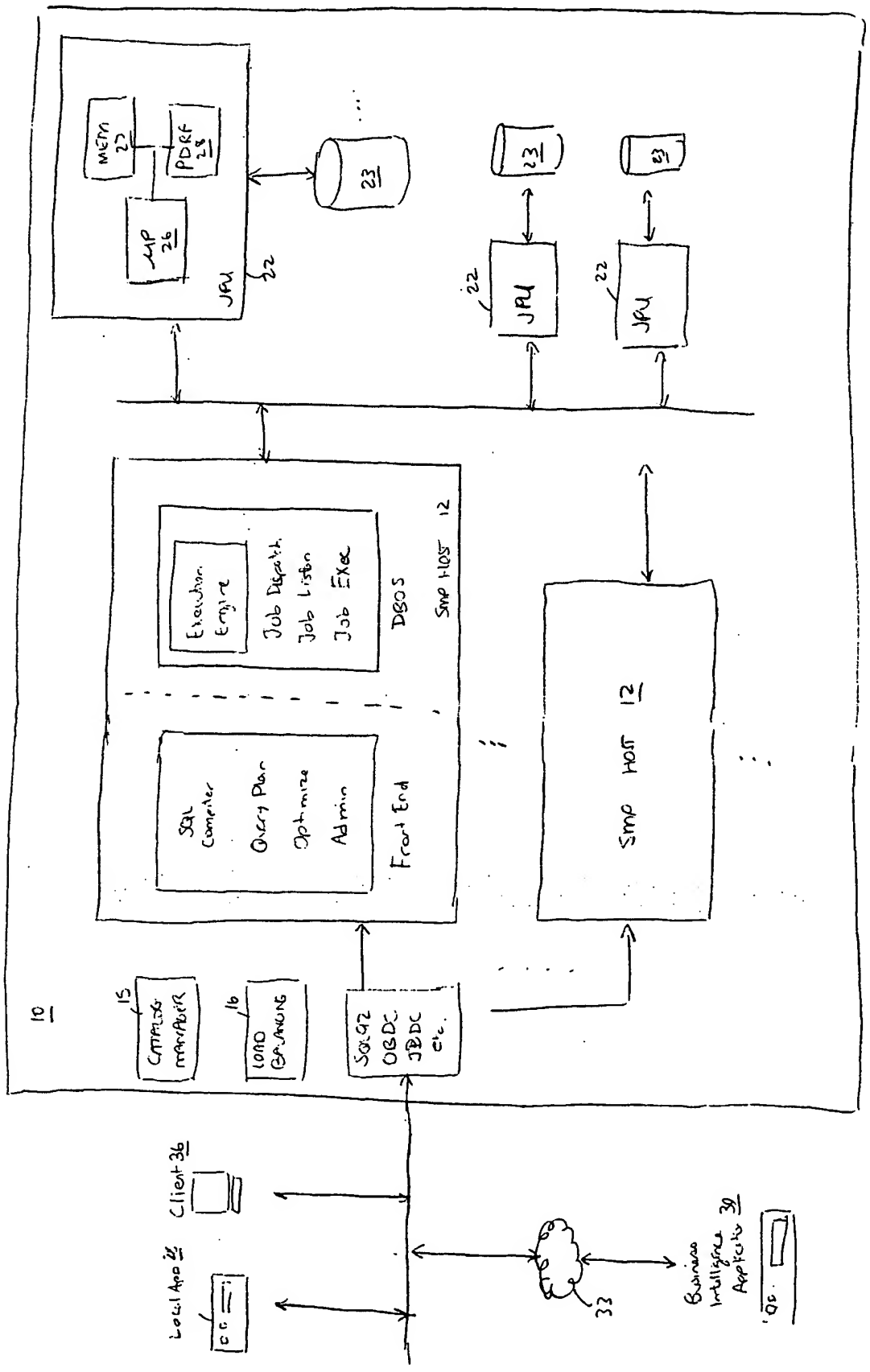
MEM 27
PDRF 28
JMP 26
JPU
22
23
Execution Engine
Job Dispatch
Job Listen
Job Exec
DBOS
SMP HOST 12
SQL Compiler
Query Plan
Optimize
Admin
Front End
SMP HOST 12
10
15
Catalog Manager
16
Load Balancing
SQL92 ODBC JDBC etc.
Client 36
Local App 24
33
Business Intelligence Applets 39

FIG. 1

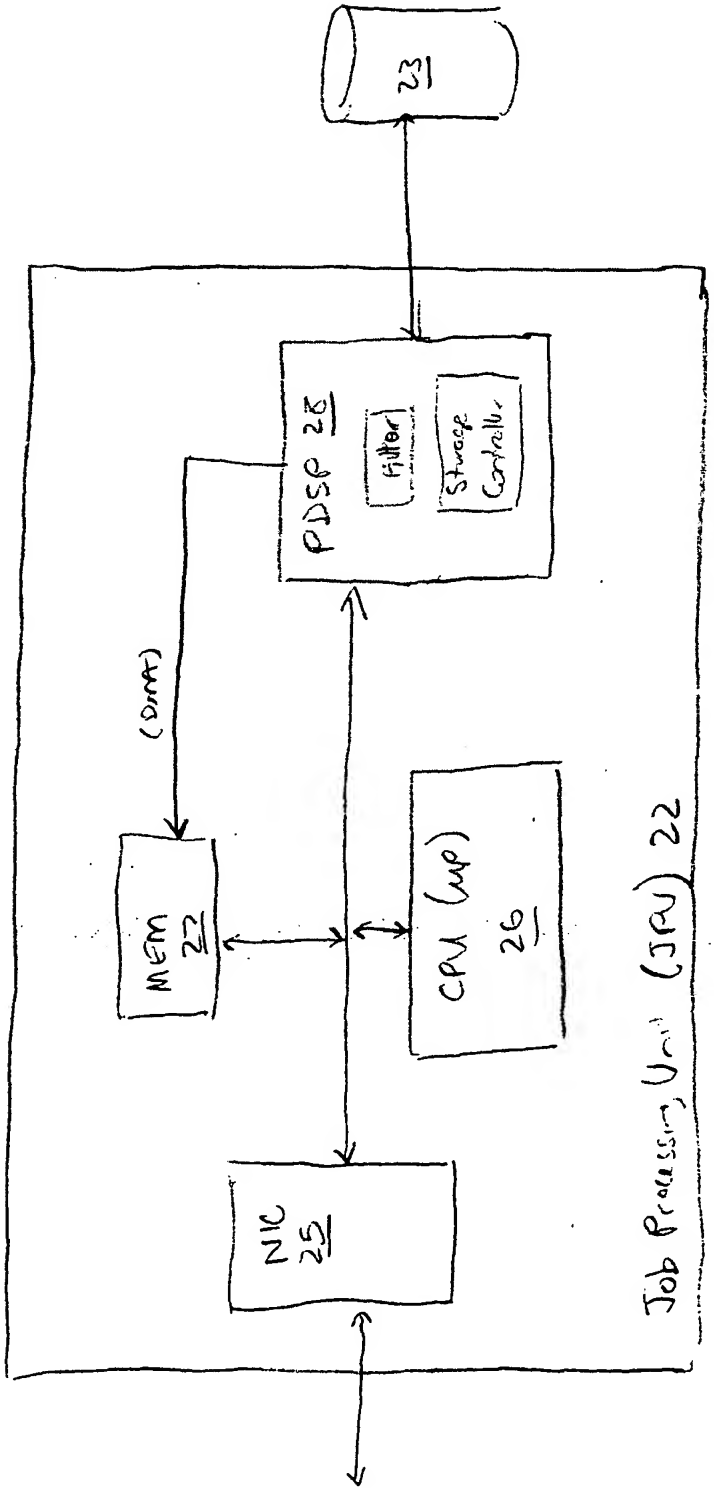
23
PDSP 28
Filter
Stream Controller
(DMA)
MEM 27
CPU (μP) 26
NIC 25
Job Processing Unit (JPU) 22

Fig. 2

HOST SOFTWARE COMPONENT DIAGRAM

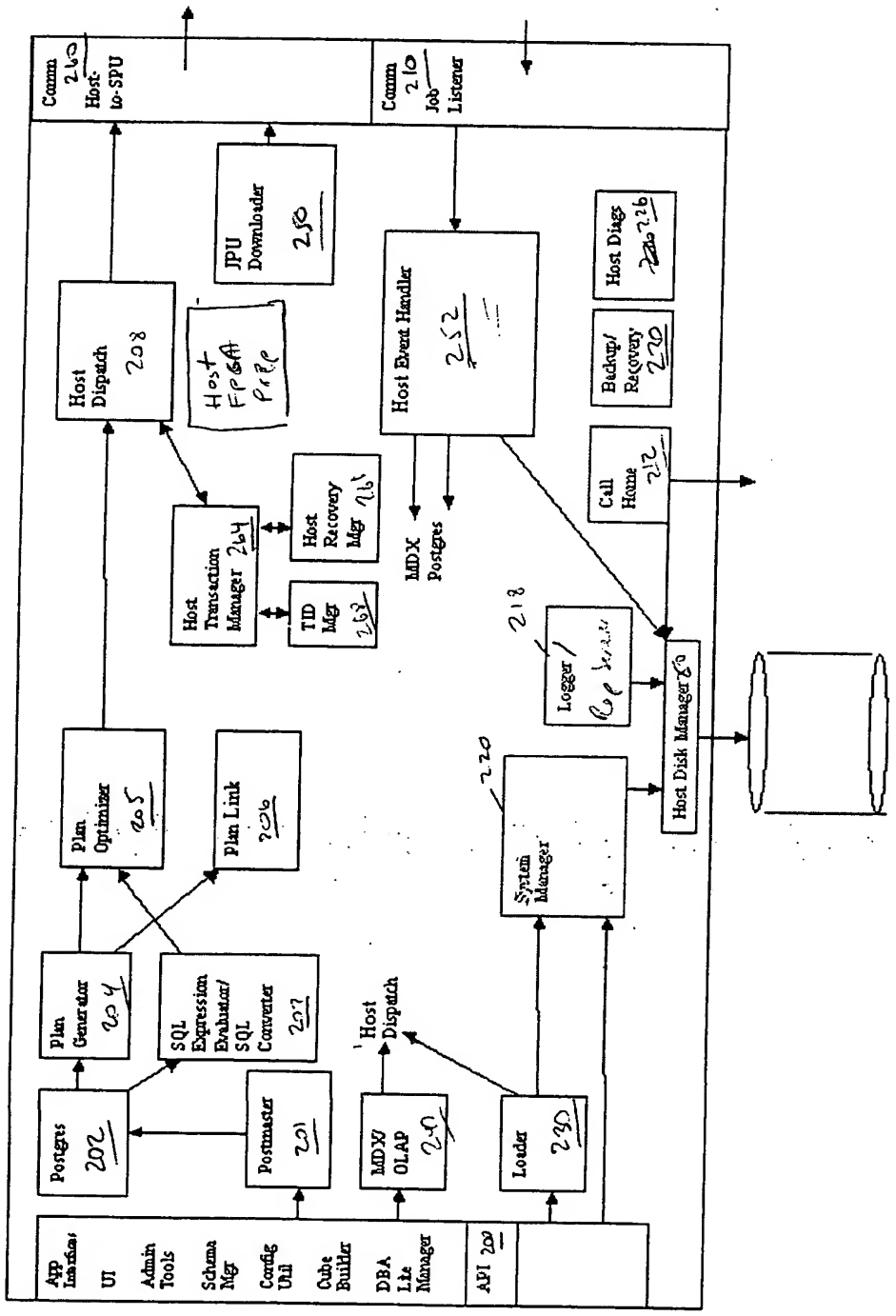

Fig. 2

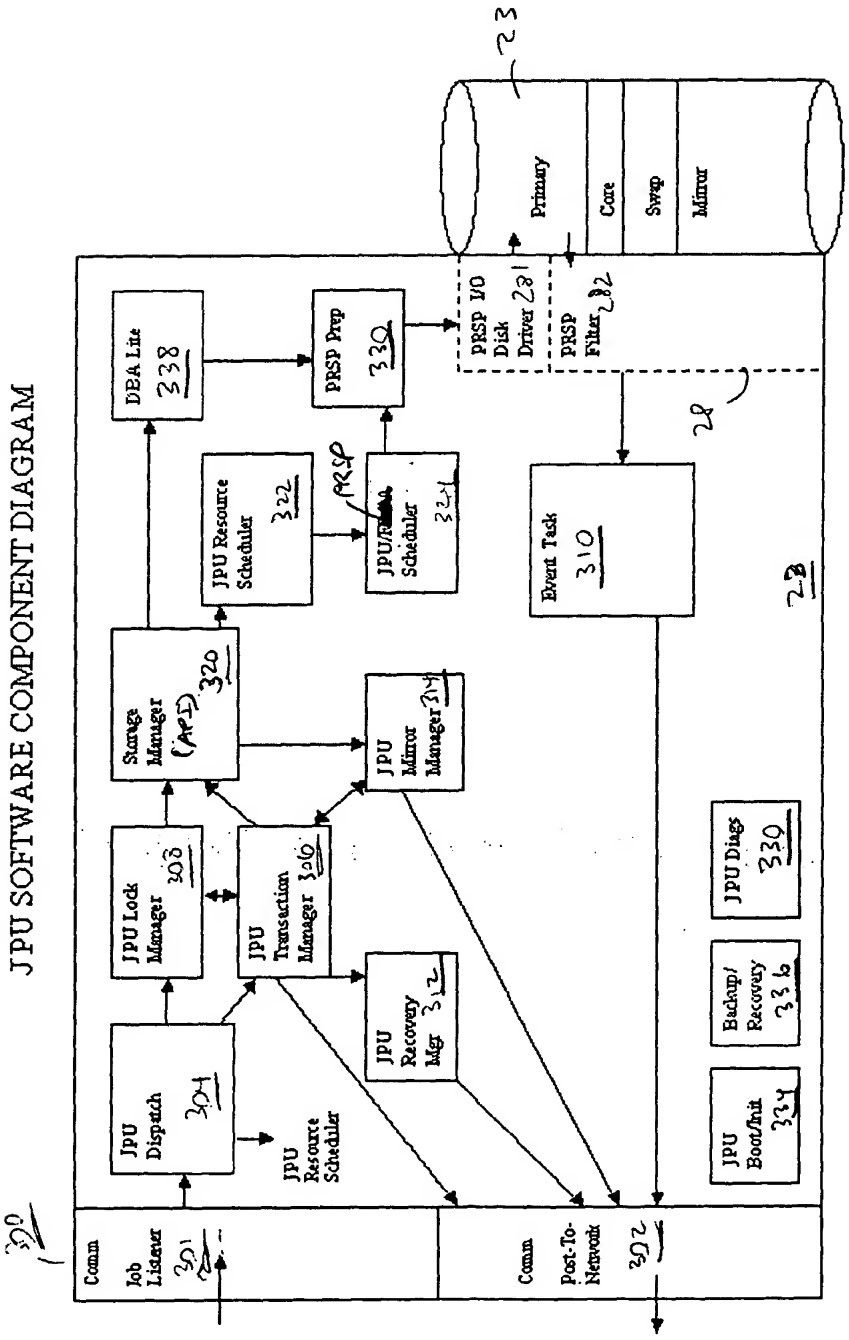
JPU SOFTWARE COMPONENT DIAGRAM
Comm
Job Listener
201
Comm
Port-To-Network
202
JPU Dispatch
204
JPU Resource Scheduler
JPU Lock Manager
208
JPU Transaction Manager
206
JPU Recovery Mgr
312
Storage Manager (SMS)
320
JPU Mirror Manager
314
JPU Resource Scheduler
322
JPU/RSP Scheduler
324
DEA Lite
338
PRSP Prep
330
PRSP I/O Disk Driver
281
PRSP Filter
282
Event Task
310
JPU Diags
339
Backup/Recovery
336
JPU Boot/Init
334
Primary
Core
Swap
Mirror
23
28
28

Fig. 4

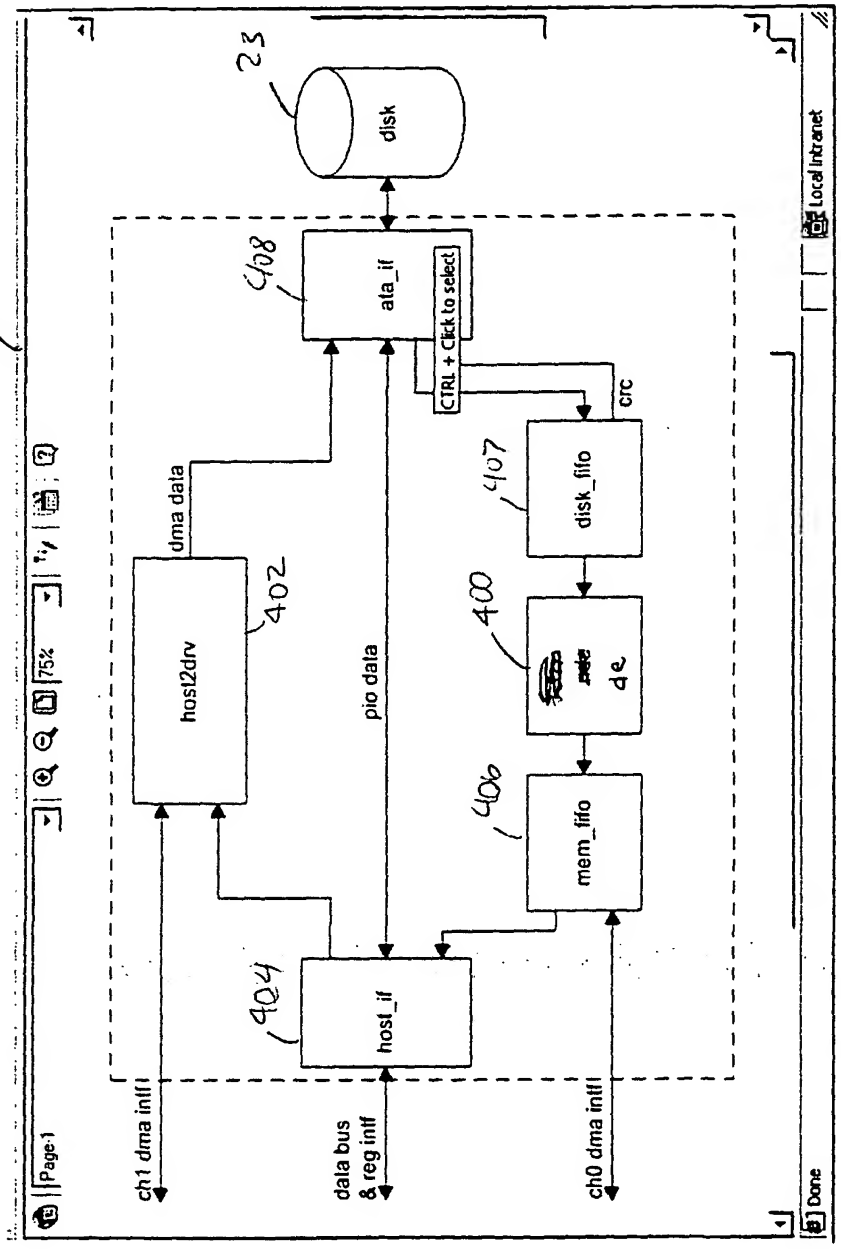
28
23
disk
408
ata_if
CTRL + Click to select
crc
407
disk_fifo
400
de
406
mem_fifo
dma data
402
host2drv
pio data
404
host_if
ch1 dma intf
data bus & reg intf
ch0 dma intf
Page-1
75%
Local Intranet
Done

Fig. 5

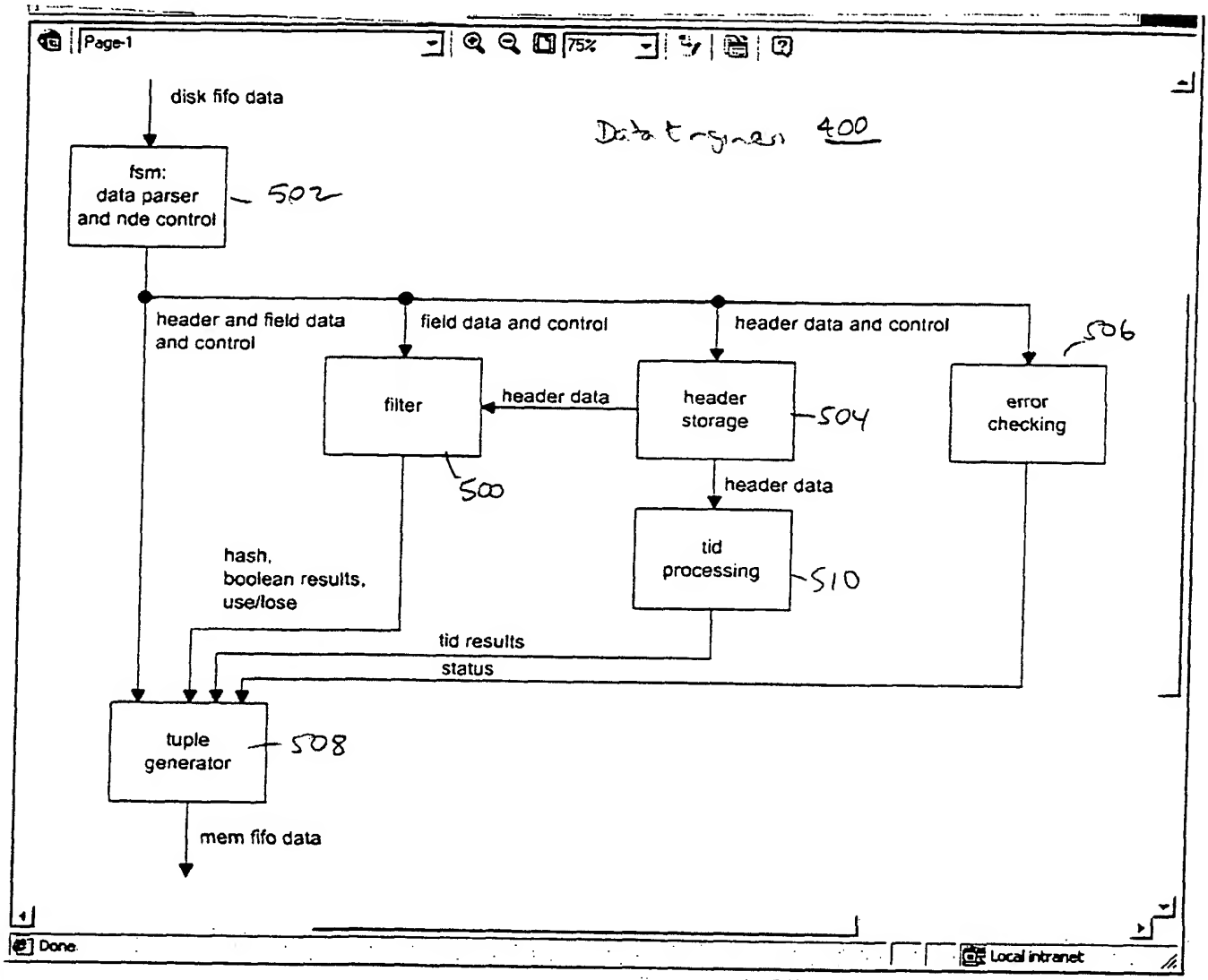
Page-1
75%
disk fifo data
Data engine 400
fsm:
data parser
and nde control
502
header and field data
and control
field data and control
header data and control
506
filter
header data
header
storage
504
error
checking
500
header data
tid
processing
510
hash,
boolean results,
use/lose
tid results
status
tuple
generator
508
mem fifo data
Done
Local intranet

Fig. 6

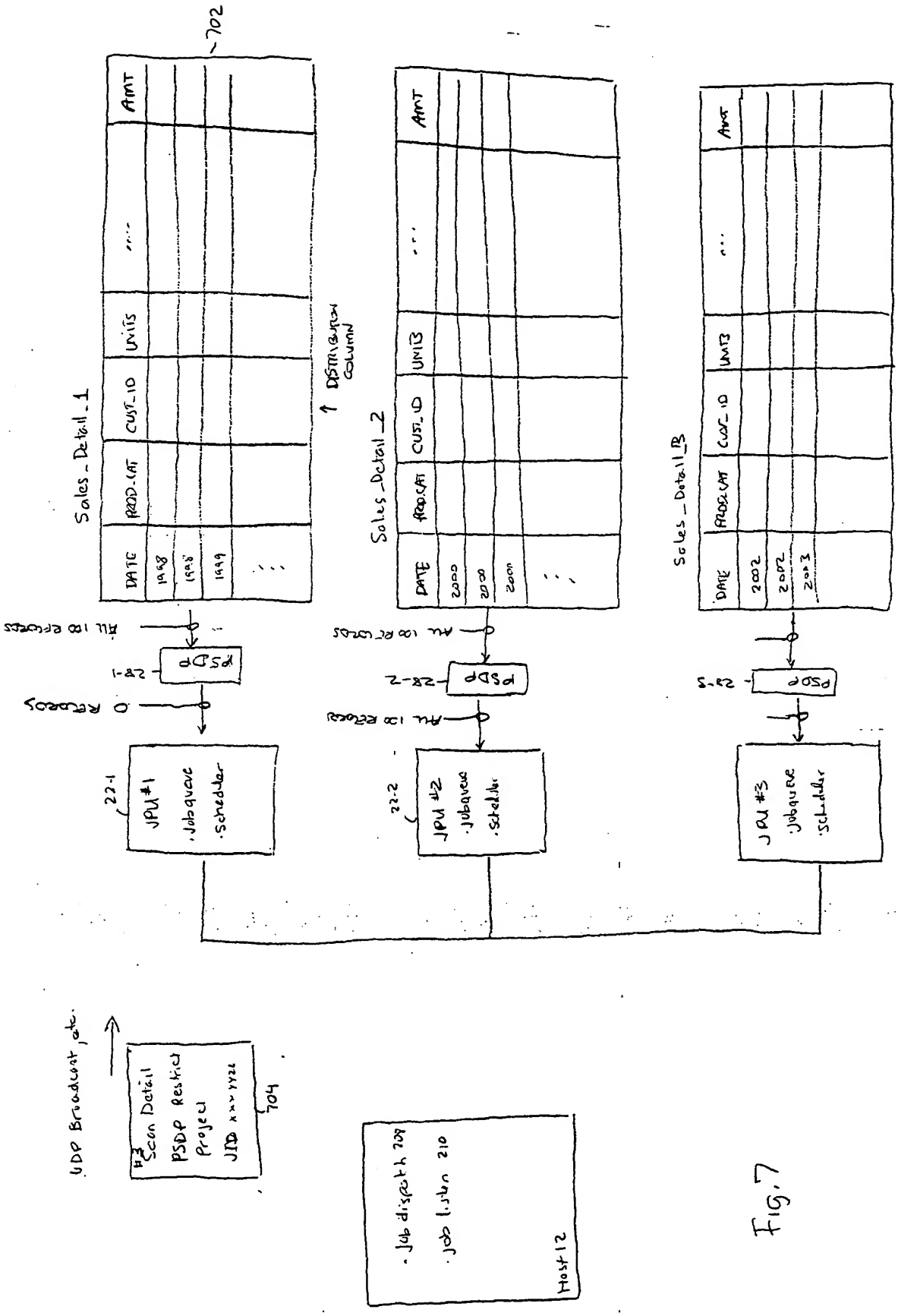
702
Sales_Detail_1
DATE
PROD_CAT
CUST_ID
UNITS
...
AMT
1998
1998
1999
Distribution column
Sales_Detail_2
2000
2000
2000
Sales_Detail_B
2002
2002
2003
All JQs Requests
PSDP
22-1
22-2
22-3
0 Requests
JPU #1
Jobqueue
Scheduler
JPU #2
JPU #3
UDP Broadcast
Scan Detail
PSDP Restrict
Project
JID xxx yyzz
704
Job dispatch 208
Job listen 210
Host 12

Fig. 7